

### **2.3.5 Threatened and Endangered Species**

#### **2.3.5.1 Regulatory Setting**

The primary federal law protecting threatened and endangered species is the FESA: 16 U.S.C., Section 1531, *et seq.* See also 50 CFR Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as FHWA, are required to consult with USFWS and NOAA Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence, and/or documentation of a No Effect finding. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, *et seq.* CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. CDFW is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions, an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive

economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

### **2.3.5.2 Affected Environment**

This section has been prepared based on the analysis and findings presented in the *Natural Environment Study* (June 2016) and *Errata* (June 2018).

The FESA mandates all federal departments and agencies to conserve listed species and to utilize their authorities in furtherance of the purposes of the FESA. The FESA provides specific mechanisms to achieve its purposes, and Section 7 is one of those. Section 7 requires that federal agencies develop a conservation program for listed species (i.e., Section 7(a)(1)) and that they avoid actions that will further harm species and their critical habitat (i.e., Section 7(a)(2)). The USGS El Toro and Tustin 7.5-minute quadrangles were reviewed for CNPS' Locational Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2016) and CDFW's CNDDDB (CDFW, 2016), and a compendium of special-status species published by USFWS and CDFW were also reviewed. A USFWS species list was received from USFWS on May 6, 2015, and an updated list was received on February 18, 2016; and an updated database search was conducted on February 27, 2018.

#### ***Threatened and Endangered Plant Species***

Based on the USFWS threatened and endangered species list, there are four federally listed threatened or endangered plant species that could occur in the project area, big-leaved crownbeard (*Verbesina dissita*), Laguna Beach liveforever (*Dudleya stolonifera*), Santa Monica Mountains dudleya (*Dudleya cymosa ssp. ovatifolia*), and thread-leaved brodiaea (*Brodiaea filifolia*). Table 2.3.3-1, in Section 2.3.3 provides a list of all special-status plants, including federally and/or state-listed species, reviewed for the project, along with a general habitat description and assessment of species presence in the project region.

No federally and/or state-listed species were determined to be present in the BSA. Focused surveys for special-status plants were conducted in 2015, and no listed plants were found.

**Table 2.3.5-1. Endangered and/or Threatened Animal Species in the Project Region**

Scientific Name	Common Name	Status		General Habitat Description	Habitat Present (P)/ Absent (A)	Rationale (Potential for Species to Occur)	Coverage Under OCTA NCCP/HCP
		USFWS	CDFW				
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	—	Occurs in vernal pools, typically deep, cool water pools; occasionally in ditches and road ruts with suitable conditions.	A	Not expected to occur; lack of suitable habitat.	Not covered
<i>Oncorhynchus mykiss irideus</i>	southern steelhead (southern California Distinct Population Segment)	FE	SSC	Occurs in cool water streams; spawns in areas of gravelly substrate in riffles or pool tails. Not historically or currently known from San Diego Creek.	A	Not expected to occur; outside known range (NMFS, 2012).	Not covered
<i>Anaxyrus californicus</i>	arroyo toad	FE	SSC	Occurs in shallow slow-moving streams with sand or fine gravel substrate that are disturbed periodically by flooding; adjacent upland foraging habitat consists of coastal sage scrub, chaparral, grasslands, and oak woodland; 0 to 3,000 feet above msl.	A	Not expected to occur; lack of suitable habitat.	Not covered.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT (nesting)	SSC (nesting)	Occurs in coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries.	A	Not expected to occur; lack of suitable habitat.	Not covered
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE (nesting)	SE (nesting)	Occurs in dense riparian habitats along streams and other wetlands, usually near surface water.	P	Not expected to occur; not observed during focused surveys; suitable habitat.	Covered

**Table 2.3.5-1. Endangered and/or Threatened Animal Species in the Project Region**

Scientific Name	Common Name	Status		General Habitat Description	Habitat Present (P)/ Absent (A)	Rationale (Potential for Species to Occur)	Coverage Under OCTA NCCP/HCP
		USFWS	CDFW				
<i>Poliophtila californica</i>	coastal California gnatcatcher	FT	SSC	Occurs in coastal sage scrub and coastal sage scrub-grassland ecotones.	A	Not expected to occur; lack of suitable habitat.	Covered
<i>Rallus longirostris levipes</i>	light-footed clapper rail	FE	SE/FP	Occurs in coastal salt marshes of pickleweed and Pacific cordgrass.	A	Not expected to occur; lack of suitable habitat.	Not covered
<i>Sternula antillarum browni</i>	California least tern	FE	SE/FP	Nests on sandy beaches. Forages for fish along major creeks and rivers.	P (foraging) A (nesting)	Observed foraging; suitable foraging habitat; not expected to occur for nesting; no suitable nesting habitat.	Not covered
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE (nesting)	SE (nesting)	Occurs in early successional riparian habitats; structurally diverse woodlands along watercourses; mulefat scrub, willow scrub, willow riparian forest, cottonwood-willow riparian forest.	P	Observed; suitable habitat.	Covered
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE	SSC	Occurs in fine-grained sandy substrates in open coastal sage scrub, coastal strand, coastal dune, and river alluvium; within 2.5 miles of the coast.	A	Not expected to occur; lack of suitable habitat.	Not covered
UCDANR = University of California Division of Agriculture and Natural Resources							
Status Codes: <div> <u>Federal</u>            FE = Federally listed; Endangered.            FT = Federally listed; Threatened.         </div> <div> <u>State</u>            ST = State listed; Endangered.            SE = State listed; Threatened.            SSC = Species of Special Concern            SE/FP = State Listed, Fully Protected         </div>							

### ***Threatened and Endangered Animal Species***

Nine federally or state-listed endangered and/or threatened species of animals are known to occur in the region (Table 2.3.5-1). Three of these were judged to have potential to occur in the BSA based on species requirements and study area conditions. These are southwestern willow flycatcher (*Empidonax trallii extimus*), California least tern (*Stemula antillarum browni*), and least Bell's vireo (*Vireo bellii pusilus*). As a candidate species, this species is treated as if it is listed until it is determined otherwise. These three species are further discussed below.

Focused surveys for southwestern willow flycatcher, California least tern, and least Bell's vireo were conducted in spring/summer 2015. Locations of siting of these species are shown in Figure 2.3.5-1 (Sheets 1 through 3).

#### ***Southwestern willow flycatcher***

Southwestern willow flycatcher is a federally and state-listed endangered species; its nesting locations are protected. It is a covered species in the OCTA NCCP/HCP. This species occurs in riparian habitats along rivers, streams, or other wetlands where there are dense growths of willows (*Salix* spp.), baccharis (*Baccharis* sp.), arrowweed (*Pluchea* sp.), tamarisk (*Tamarix* sp.), or other plants present, often with a scattered overstory of cottonwood. Suitable habitat for this species is present in the BSA. Focused surveys for this species were conducted in spring/summer 2015, and migrant species were observed in the San Diego Creek area.

#### ***California least tern***

California least tern is a federally and state-listed endangered species and a California fully-protected species; nesting colonies are protected. This species is not covered by the OCTA NCCP/HCP. This migratory tern nests on sandy beaches from April through August along the coast of California from San Francisco south to Baja California, Mexico. It forages within 2 miles of breeding sites in near-shore ocean waters, willow estuaries, and lagoons. No critical habitat has been designated for this species.

Suitable foraging, but no suitable nesting habitat, for this species is present in the BSA. California least tern was incidentally observed foraging along San Diego Creek – North in the BSA during the 2015 focused surveys for least Bell's vireo/southwestern willow flycatcher, but it would not be expected to nest in the BSA.

### *Least Bell's Vireo*

Least Bell's vireo is a federally and state-listed endangered species; its nesting locations are protected. It is a covered species in the OCTA NCCP/HCP. This species was formerly considered to be a common breeder in riparian habitats throughout the Central Valley and other low elevation river systems in California and Baja California, Mexico. It is now a rare and local summer resident of southern California's lowland riparian woodlands. The least Bell's vireo primarily breeds in riparian habitats dominated by willows with dense understory vegetation.

Suitable habitat for the least Bell's vireo is located along both San Diego Creek – North and San Diego Creek – South. Focused surveys for this species were conducted in spring/summer 2015, and least Bell's vireos were observed at seven locations either in or adjacent to the BSA during the surveys. Least Bell's vireo is expected to occur along both San Diego Creek – North and San Diego Creek – South in the BSA, as well as in the basin adjacent to the Sand Canyon Avenue SB exit.

### **2.3.5.3 Environmental Consequences**

#### ***Alternative 1 (No Build)***

There would be no permanent impacts to threatened and endangered species associated with the No Build Alternative.

#### **Construction (Short-Term) Impacts**

No improvements would be implemented with the No Build Alternative; therefore, there would be no temporary impacts to either threatened and endangered plants or animals associated with that alternative.

#### ***Build Alternative 2 (Preferred Alternative) and Build Alternative 3***

Both build alternatives (Alternatives 2 and 3) would result in the same permanent impacts to threatened and endangered animals as discussed below. Habitat locations outside the project's limits and the species that use that habitat could be indirectly impacted from dust; changes in hydrology; erosion, siltation, and increased runoff; and invasion by non-native species introduction and spreading.



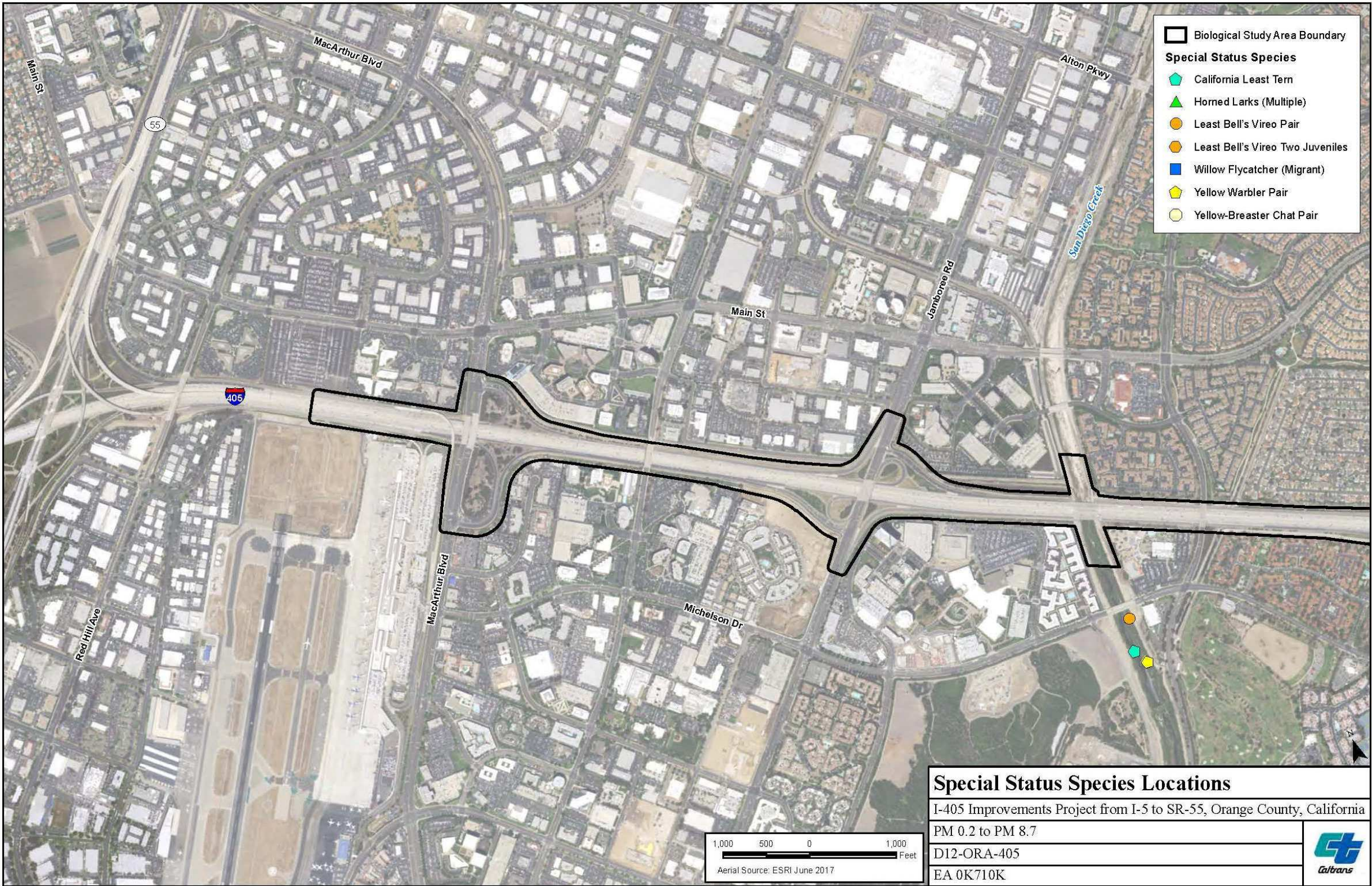


Figure 2.3.5-1. Special-Status Species Locations (Sheet 1 of 3)



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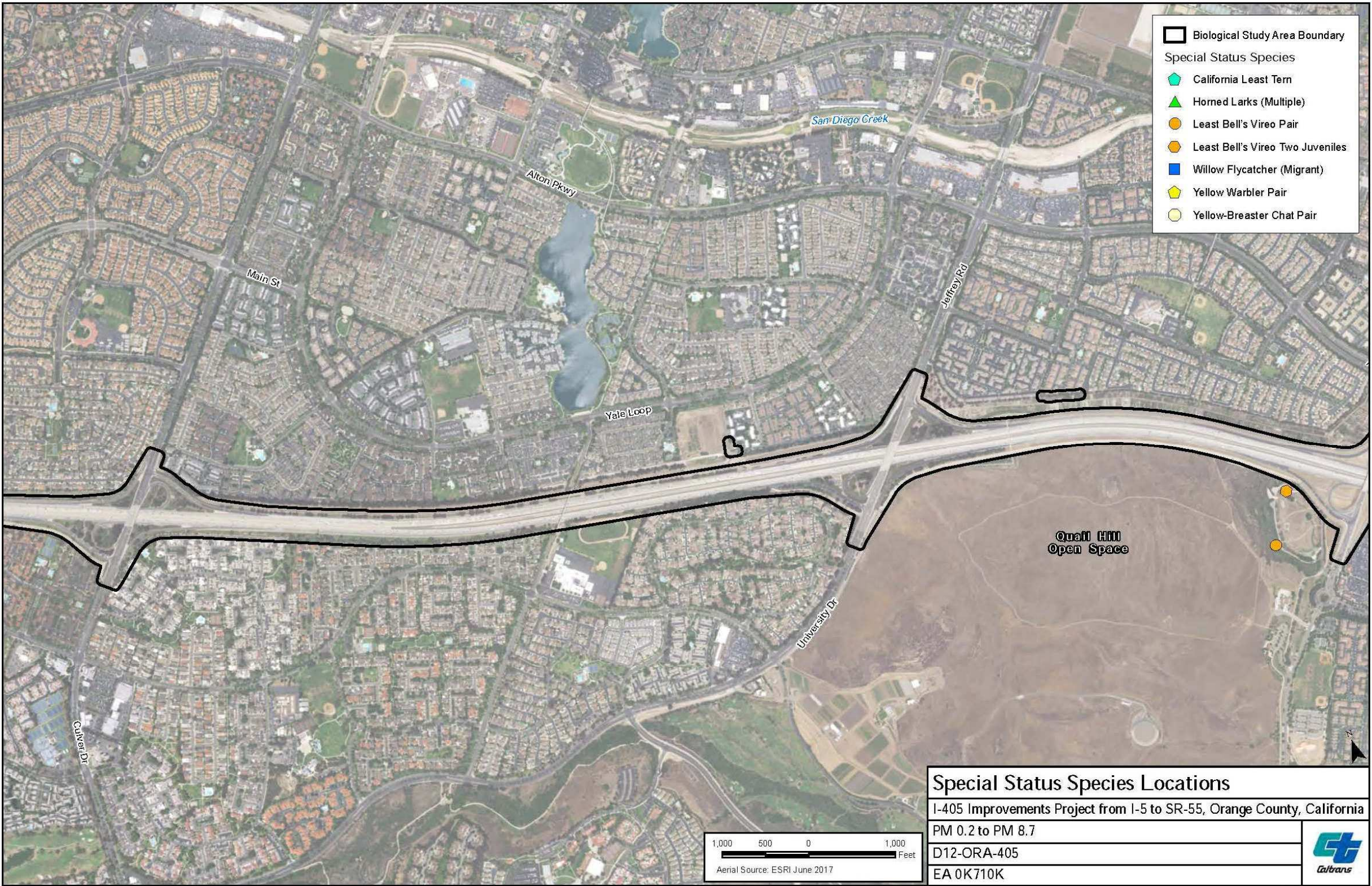


Figure 2.3.5-1. Special-Status Species Locations (Sheet 2 of 3)



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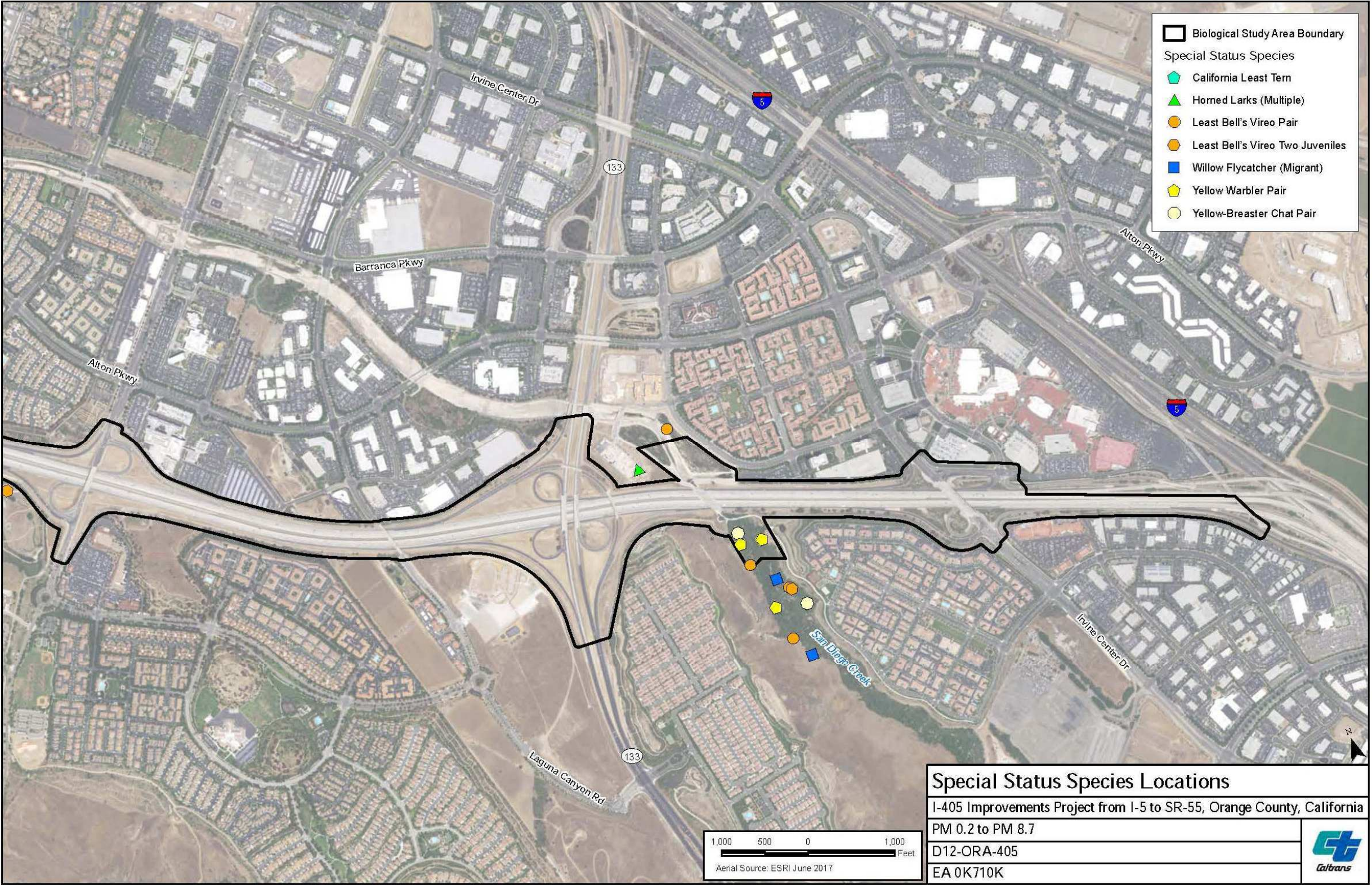


Figure 2.3.5-1. Special-Status Species Locations (Sheet 3 of 3)



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*Willow Flycatcher*

Although suitable habitat is present in the BSA and two migrant willow flycatchers of unidentified subspecies (*Empidonax traillii* spp.) were observed during their migratory period, the southwestern subspecies of willow flycatcher (*Empidonax traillii extimus*) was not observed during the 2015 focused surveys. Therefore, southwestern willow flycatcher is not expected to nest in the BSA and would not be adversely affected by the project. No mitigation would be required.

*California Least Tern*

The roadway improvements associated with Alternatives 2 and 3 would permanently impact up to 0.19 acre of suitable foraging habitat for the California least tern (Table 2.3.5-2); however, it would not impact any nesting habitat for the species. The effects from Alternatives 2 and 3 are considered less than substantial because there would only be a minimal loss of suitable foraging habitat relative to the amount available in the project region; therefore, the project is not likely to adversely affect this species. Although this species occurs for foraging, there is no potential for it to nest in the BSA, and no mitigation would be required.

**Table 2.3.5-2. Project Impacts on California Least Tern Habitat – Alternatives 2 and 3**

<b>Vegetation Communities*</b>	<b>Existing (Acres)</b>	<b>Permanent Impact (Acres)</b>	<b>Temporary Impact (Acres)</b>	<b>Total Impact (Acres)</b>
Coastal Freshwater Marsh (6.4)	1.68	0.00	0.00	0.00
Riparian Herb (7.1)	1.57	0.05	0.08	0.13
Southern Black Willow Forest (7.7)	7.25	0.12	0.00	0.12
Perennial Rivers and Streams (13.1)	2.57	0.02	0.08	0.10
<b>Total</b>	<b>13.08</b>	<b>0.19</b>	<b>0.16</b>	<b>0.35</b>
* Numbers following vegetation names correspond to numbering in Gray and Bramlet (1992).				

*Least Bell's Vireo*

Approximately 0.19 acre of suitable least Bell's vireo habitat would be permanently impacted by the build alternatives (Table 2.3.5-3). None of the six least Bell's vireo territories identified in the project area would be directly impacted; however, the build alternatives may indirectly impact three territories that are within 500 feet of the project footprint. One location is in the basin adjacent to the SB Sand Canyon Avenue exit, and two locations are within 500 feet of I-405 along San Diego Creek – South. The project-related effects are considered potentially substantial.

**Table 2.3.5-3. Project Impacts on Least Bell's Vireo Habitat –  
Alternatives 2 and 3**

<b>Vegetation Communities*</b>	<b>Existing (Acres)</b>	<b>Permanent Impact (Acres)</b>	<b>Temporary Impact (Acres)</b>	<b>Total Impact (Acres)</b>
Riparian Herb (7.1)	1.57	0.05	0.08	0.13
Southern Willow Scrub (7.2)	0.84	0.00	0.00	0.00
Mule Fat Scrub (7.3)	2.35	0.00	0.00	0.00
Southern Black Willow Forest (7.7)	7.25	0.12	0.00	0.12
Perennial Rivers and Streams (13.1)	2.57	0.02	0.08	0.10
<b>Total</b>	<b>14.59</b>	<b>0.19</b>	<b>0.16</b>	<b>0.35</b>
* Numbers following vegetation names correspond to numbering in Gray and Bramlet (1992).				

Effects determinations for each USFWS threatened and endangered species are shown in Table 2.3.5-4.

**Table 2.3.5-4. Effects Determination for Species Identified  
by the Official Species List**

Scientific Name	Common Name	Status		General Habitat Description	Effect Determination
		USFWS	CDFW		
Crustaceans					
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	–	Occurs in vernal pools, typically deep, cool water pools; occasionally in ditches and road ruts with suitable conditions.	No effect.
Fish					
<i>Oncorhynchus mykiss irideus</i>	southern steelhead (southern California Distinct Population Segment)	FE	SSC	Occurs in cool water streams; spawns in areas of gravelly substrate in riffles or pool tails (UCDANR). Not historically or currently known from San Diego Creek.	No effect.

**Table 2.3.5-4. Effects Determination for Species Identified  
by the Official Species List**

Scientific Name	Common Name	Status		General Habitat Description	Effect Determination
		USFWS	CDFW		
Amphibians					
<i>Anaxyrus californicus</i>	arroyo toad	FE	SSC	Occurs in shallow slow-moving streams with sand or fine gravel substrate that are disturbed periodically by flooding; adjacent upland foraging habitat consists of coastal sage scrub, chaparral, grasslands, and oak woodland; 0 to 3,000 feet above msl (USFWS, 1999).	No effect.
Birds					
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT (nesting)	SSC (nesting)	Occurs in coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries.	No effect.
<i>Empidonax traillii eximius</i>	southwestern willow flycatcher	FE (Nesting)	SE (Nesting)	Occurs in dense riparian habitats along streams and other wetlands, usually near surface water (USFWS, 2002).	No effect.
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	FT	SSC	Occurs in coastal sage scrub and coastal sage scrub-grassland ecotones.	No effect.
<i>Rallus longirostris levipes</i>	light-footed clapper rail	FE	–	Occurs in coastal salt marshes of pickleweed and Pacific cordgrass.	No effect.
<i>Sternula antillarum browni</i>	California least tern	FE	SE/FP	Nests on sandy beaches. Forages for fish along major creeks and rivers.	No effect.

**Table 2.3.5-4. Effects Determination for Species Identified  
by the Official Species List**

Scientific Name	Common Name	Status		General Habitat Description	Effect Determination
		USFWS	CDFW		
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE (Nesting)	SE (Nesting)	Occurs in early successional riparian habitats; structurally diverse woodlands along watercourses; mule fat scrub, willow scrub, willow riparian forest, cottonwood-willow riparian forest (USFWS, 1998a)	May affect, not likely to adversely affect.
<b>Mammals</b>					
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE	SSC	Occurs in fine-grained sandy substrates in open coastal sage scrub, coastal strand, coastal dune, and river alluvium; within 2.5 miles of the coast (USFWS, 1998b).	No effect.
<b>Flowering Plants</b>					
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT	SE	Clay soils in open chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grasslands, vernal pools; 82 to 2,822 feet above msl.	No effect.
<i>Dudleya cymosa ssp. ovatifolia</i>	Santa Monica Mountains dudleyea	FT	—	Chaparral, coastal scrub, volcanic or sedimentary, rocky; 49 to 1,640 feet above msl.	No effect.
<i>Dudleya stolonifera</i>	Laguna Beach liveforever	FT	ST	Cliffs, outcrops, and rocky soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; 0 to 820 feet above msl; coastal areas.	No effect.
<i>Verbesina dissita</i>	big-leaved crownbeard	FT	ST	Southern maritime chaparral; 0 to 656 feet above msl.	No effect.



**Table 2.3.5-4. Effects Determination for Species Identified  
by the Official Species List**

Scientific Name	Common Name	Status		General Habitat Description	Effect Determination
		USFWS	CDFW		
UCDANR = University of California Division of Agriculture and Natural Resources					
Status Codes:					
<u>Federal</u>		<u>State</u>			
FE = Federally listed; Endangered.		ST = State listed; Endangered.			
FT = Federally listed; Threatened.		SE = State listed; Threatened.			
		SSC = Species of Special Concern			
		SE/FP = State Listed, Fully Protected			

### **Construction (Short-Term) Impacts**

Construction of the project would include use of heavy equipment to clear vegetation and grade the project site. This activity would create noise, dust, and vibration that could adversely affect animals within and next to the construction site. This disturbance could cause animals to move away from construction. Habitat next to the construction site may not be used by species sensitive to construction noise, dust, and vibration effects. Both build alternatives would result in minimal temporary construction-related impacts to habits potentially used by threatened or endangered animal species.

If construction limits are not clearly marked, construction operators could inadvertently remove habitat that should not be removed. With implementation of proposed measures BIO-1 through BIO-4 (as described in Section 2.3.1.3) and BIO-5 through BIO-18 (refer to Section 2.3.4.4), no adverse effects to threatened and endangered species would occur from project construction.

### **2.3.5.4 Avoidance, Minimization, and/or Mitigation Measures**

#### ***Threatened and Endangered Plants Species***

There are no impacts to listed plants; therefore, avoidance and minimization measures are not necessary. No compensatory mitigation is necessary.

#### ***Threatened and Endangered Animal Species***

Numerous avoidance, minimization, and/or mitigation measures have been identified that would minimize or avoid temporary or permanent impacts to threatened and endangered

animal species. These measures, which have been described in previous sections, include BIO-1 through BIO-16 and BIO-20. With implementation of the proposed measures, no adverse effects to threatened and endangered species would occur.

Under the OCTA NCCP/HCP, a streamlined Section 7 consultation and Biological Assessment has been completed for this project in accordance with the terms and conditions of the CDFW and USFWS issued take permits for the OCTA Renewed Measure M NCCP/HCP and the associated Implementing Agreement. OCTA and Caltrans have confirmed the project is covered under and consistent with the CDFW and USFWS permits. OCTA and Caltrans have executed a Certificate of Inclusion extending take coverage under the permit to this project and agreeing to implement avoidance and minimization measures BIO-1 through BIO-4, BIO-7 through BIO-11, BIO-15, BIO-21, and BIO-25 through BIO-28. Caltrans obtained concurrence from CDFW and USFWS on March 28, 2018.

In addition, as part of the OCTA NCCP/HCP, OCTA has provided compensatory mitigation for least Bell's vireo, including acquisition of the Hayashi Preserve, funding the Aliso Creek and City Parcel restoration projects, and funding an additional seven restoration projects that include restoration of riparian habitat in locations with documented occurrences of least Bell's vireo near the proposed project. Permitting for the least Bell's vireo was completed with finalization of the OCTA M2 NCCP/HCP and subsequent receipt of CDFW and USFWS take permits in June 2017.